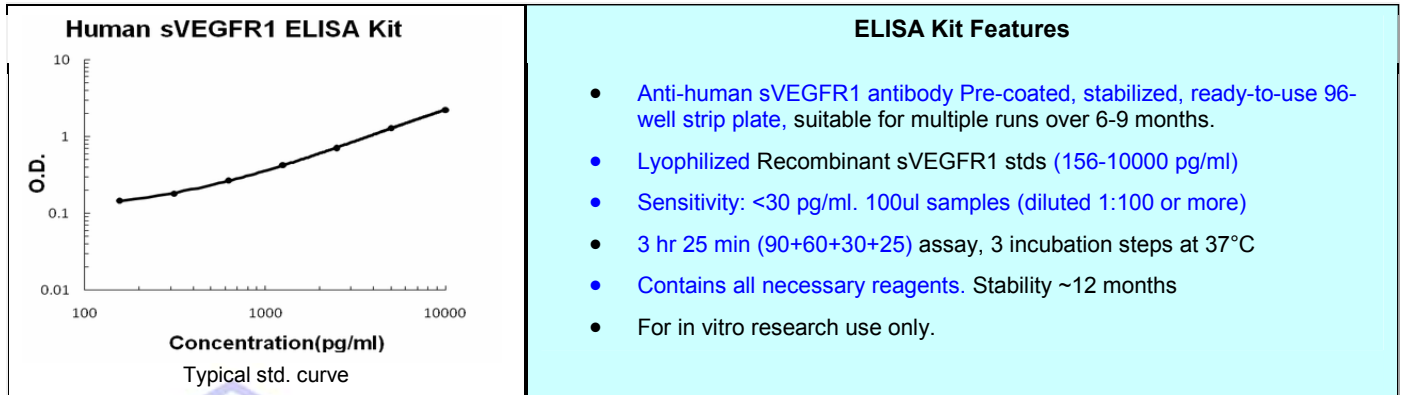


Human soluble fms like tyrosine kinase (sFlt-1) ELISA Kit, 96 tests Cat# 200-850-FLT

The Human soluble fms like tyrosine kinase ELISA kit is intended for the quantitative measurement of soluble form of VEGF receptor known as sVEGFR1 /sFlt-1 in human serum, plasma and culture supernatant. *For research use only.*



Assay Procedure: Allow all reagents to reach room temperature.

- Step 1. Pipet **100 ul** each of pre-diluted standards, samples (diluted 1:100 or more) into pre-coated wells. Cover and incubate for **90 mins at 37 C**
- Step 2. Discard contents. Add **100 ul of biotinylated antibody working soln.** to all wells. Cover and incubate at **37°C** for 60 min.
- Step 3. Aspirate and wash 3X. Add **100 ul of ABC working soln** to all wells. Cover and incubate at **37°C** for 30 min.
- Step 4. Aspirate and wash 5X. Add **90 ul of TMB** to all wells. Cover and incubate at **37°C** for 25 min.
- Step 5. Add 100 ul **stop** solution into each well and mix gently (blue color turns yellow). Measure absorbance at 450 nm. Determine Antibody conc. in each sample using the standards

Interpretation of results

The mean values for the measured absorptions are calculated after subtraction of the blank values from the controls and standards.

Precision:

Intra-assay (%CV): 4.2-4.9

Inter-assay (%CV): 5.2-6.5

Specificity:

Specific to natural and recombinant human sVEGFR1

Cross reactivity:

No detectable cross reactivity with other relevant proteins.

General Information

Vascular endothelial growth factor A (VEGF/VEGF-A), a dimeric glycosylated protein, is a member of the platelet-derived growth factor (PDGF/VEGF) family. VEGFA is essential for adults during organ remodeling and diseases that involve blood vessels, for example, in wound healing, tumor angiogenesis, diabetic retinopathy, and age-related muscular degeneration. During early vertebrate development, vasculogenesis occurs which means that the endothelial condense into the blood vessels. VEGF-A is produced as a group of three major isoforms as a result of alternative splicing and if any three isoforms are produced (VEGF-A120, VEGF-A164, and VEGF-A188). VEGF-A could be used to treat patients with neurodegenerative and neuropathic conditions and also increase vascular permeability which will stop the blood-brain barrier and increase inflammatory cell infiltration. VEGF-A mediates the growth of new blood vessels from pre-existing vessels.

sVEGFR1, also known as sFMS-related tyrosine kinase 1(sFLT1) is the soluble receptor for VEGF. It is generated by alternative splicing of the FLT1 gene sFlt1 binds to all isoforms of VEGF-A and placenta growth factor (PlGF) with high affinity .It can inhibit their biological activities and can also form VEGF-stabilized complex with the extracellular domain of VEGFR2 Oncogene sFLT belongs to the src gene family and is related to oncogene ROS. Like other members of this family, it shows tyrosine protein kinase activity that is important for the control of cell proliferation and differentiation. sFLT is mapped to 13q12. An increased sFlt1 level is associated with endothelial dysfunction in chronic kidney disease and correlates well with the prediction of cardiovascular risk associated with this disease. In physiological settings, sFlt1 bind and sequester VEGF-A at a distance from the endothelial cell surface for proper vessel morphogenesis.

ADI's soluble fms like tyrosine kinase ELISA detects soluble sVEGFR1/sFlt-1 in human serum, plasma and culture supernatant. Additional ELISA kits are also available to measure VEGF, VEGFR1, and VEGFR2 levels. For research use only.

Related ELISA kits

Catalog#	Product Description
200-820-VEF	Human VEGF ELISA Kit, 96 tests
200-830-VEM	Mouse VEGF ELISA Kit, 96 tests
200-830-VER	Rat VEGF ELISA Kit, 96 tests
200-850-FLT	Human VEGFR1/FLT1 ELISA Kit for human samples, 96 tests
200-860-KDR	Human VEGFR2/KDR ELISA Kit for human samples, 96 tests

200-850-FLT-Human-sFlt-1-ELISA-Ftr

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